

CLAIMS

What is claimed as new and desired to be protected by Letters Patent of the United States is:

1. A data recording method for an optical disk drive, comprising the steps of:
encoding and recording data blocks, wherein each of the data blocks comprises a main data area and an auxiliary data area;
detecting whether a buffer under run occurs;
stopping a recording operation after at least one main data of the data block currently being recorded has been recorded, if the buffer under run occurs; and
restarting to encode and record from the beginning of the next data block.
2. The data recording method for an optical disk drive in accordance with Claim 1, wherein the recording stops at the auxiliary data area.

3. The data recording method for an optical disk drive in accordance with Claim 2, wherein a part of auxiliary data in the auxiliary data area is not recorded, thereby the data of the data block where the recording stops is discontinuous with that of the next data block.
4. The data recording method for an optical disk drive in accordance with Claim 1, wherein the buffer under run is detected if the number of encoded data blocks is smaller than a threshold value.
5. The data recording method for an optical disk drive in accordance with Claim 1, wherein the auxiliary data area stores error correction codes of the main data area.
6. The data recording method for an optical disk drive in accordance with Claim 1, which is applied to a digital video drive (DVD).
7. A data recording method for an optical disk drive, comprising the steps of:
encoding and recording data blocks;

detecting whether a servo error occurs;
stopping a recording operation if a servo error occurs; and
restarting to encode and record data from the data block
where the recording stops or at least one data block
preceding the data block where the recording stops.

8. The data recording method for an optical disk drive in accordance with Claim 7, wherein the data restart to encode and record from the beginning of the data block where the recording stops.
9. The data recording method for an optical disk drive in accordance with Claim 7, wherein the servo error is caused by vibration, laser defocusing, track-locking error or buffer under run.
10. The data recording method for an optical disk drive in accordance with Claim 7, which is used for recording a rewritable disk.

11. The data recording method for an optical disk drive in accordance with Claim 7, which is applied to a digital video drive (DVD).